Adobe Animate

2024 Release

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Classroom in a Book®

The official training workbook from Adobe

Russell Chun

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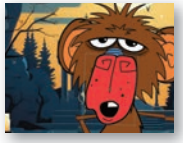

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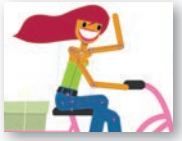

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2 CREATING GRAPHICS AND TEXT

Lesson overview

In this lesson, you'll learn how to do the following:

- Draw rectangles, ovals, and other shapes.
- Modify the shape, color, and size of drawn objects.
- Understand fill and stroke settings.
- Create and edit curves and variable-width strokes.
- Apply gradients and transparencies.
- Use the different paintbrushes for expressive drawing.
- Create and edit text, and use web fonts.
- Distribute objects on the Stage.
- Create and edit symbols.
- Apply filters to symbol instances.

This lesson will take about 3 hours to complete.

To get the lesson files used in this chapter, download them from the web page for this book at peachpit.com/AnimateCIB2024. For more information, see "Accessing the lesson files and Web Edition" in the Getting Started section at the beginning of this book.

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You can use rectangles, ovals, lines, and custom brushes to create interesting, complex graphics and save them as symbols, which will be displayed in your Library panel. Combine gradients, transparencies, text, and filters for even greater expressive possibilities.

Getting started

Note If you have not already downloaded the project files for this lesson to your computer from your Account page, make sure to do so now. See Getting Started at the beginning of the book.

Start by viewing the finished project to see what you'll be creating in this lesson.

1 Double-click 02End.gif to view the image.

The project is a simple illustration consisting of an octopus character and a humorous caption. In this lesson, you'll draw the shapes, modify them, and learn to combine simple elements to create more complex visuals. You won't create any animation just yet. After all, you must learn to walk before you can run! And learning to create and modify graphics is an important step before doing any animation with Adobe Animate.

2 In the Animate Home screen, select More Presets or click Create New.

The New Document dialog box opens.

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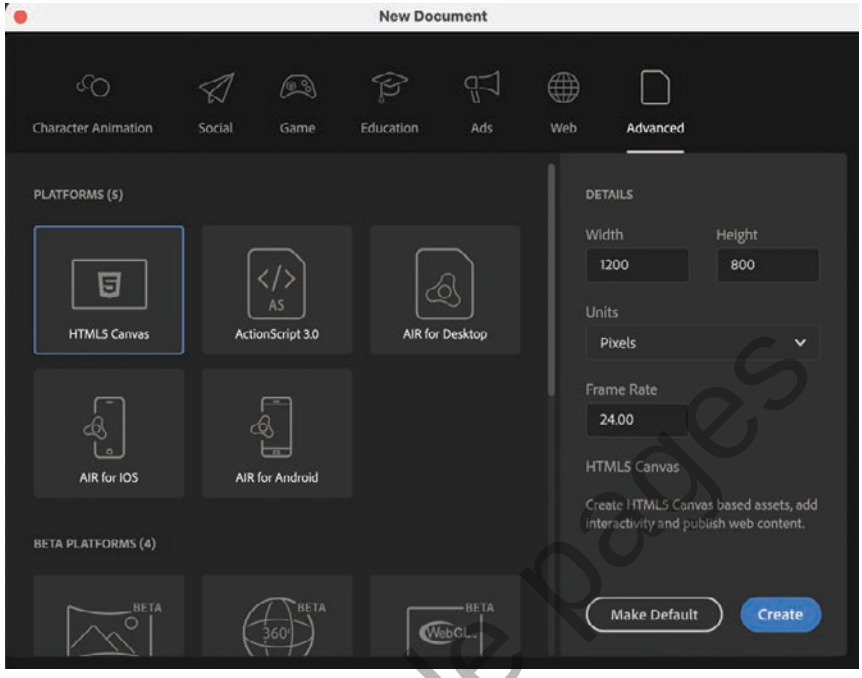
3 Choose Advanced from the top row of categories. In the Platforms section, choose HTML5 Canvas. In the Details section, make the Stage size **1200** pixels by **800** pixels, and click Create.



4 Choose File > Save. Name the file **02_workingcopy.fla,** and save it in the 02Start folder.

Saving your file right away is a good work habit (even if you've enabled the Auto-Recovery feature). It ensures that you won't lose your work if the application or your computer crashes.

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Understanding strokes and fills

Every graphic created within Animate starts with a shape. A shape consists of two components: the *fill*, or the inside of the shape, and the *stroke*, or the outlines of the shape. If you always keep these two components in mind, you'll be well on your way to creating beautiful and complicated visuals.

The fill and the stroke function independently of each other, so you can modify or delete one without affecting the other. For example, you can create a rectangle with a blue fill and a red stroke and then later change the fill to purple and delete the red stroke entirely; you'll be left with a purple rectangle without an outline. You can also move the fill or stroke independently, so if you want to move the entire shape, make sure you select both its fill and its stroke.

Creating shapes

Note In Animate, as well as in HTML documents and in web design and development in general, colors are often specified by hexadecimal numbers. The six digits after the # sign represent the red, green, and blue contributions to the color.

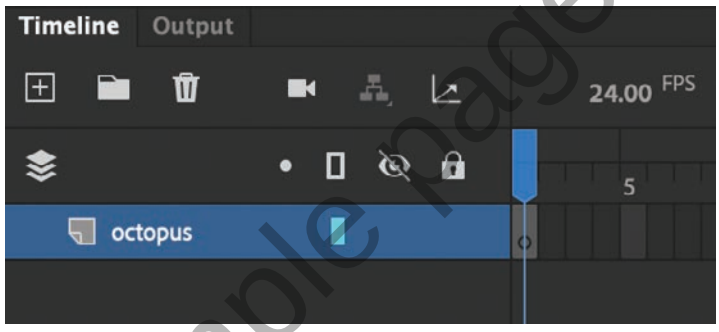
Animate includes several drawing tools, which work in different drawing modes. Many of your creations will begin with simple shapes such as rectangles and ovals, so it's important that you're comfortable drawing them, modifying their appearance, and applying fills and strokes.

You'll begin by drawing the face of the octopus.

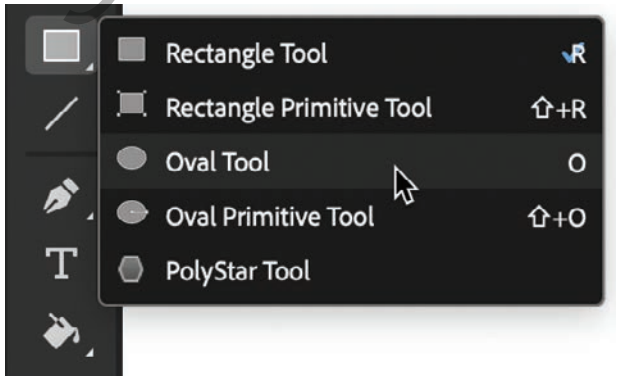
Using the Oval tool

The eyes of the octopus are essentially a series of ovals overlapping one another. To make the eyes look angry, there is a diagonal line that cuts the largest oval at a slant. You'll start by drawing the ovals. It's useful to break down complicated objects into their component parts to make it easier to draw them.

1 Rename Layer_1 **octopus**.



2 In the Tools panel, select the Oval tool, which is hidden under the Rectangle tool. Hold down the Rectangle tool to access the Oval tool underneath. Make sure the Object Drawing button at the bottom of the Tools panel or in the Properties panel is *not* selected.



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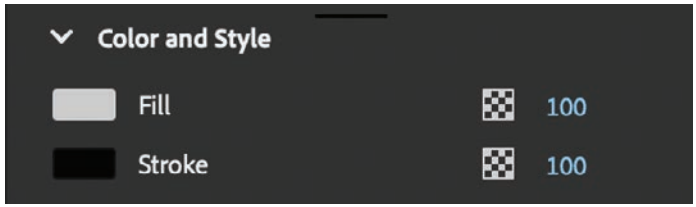
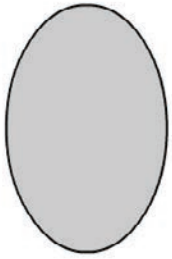
3 Choose a stroke color and a fill color from the bottom of the Tools panel or from the Properties panel. Enter **#CCCCCC** (light gray) for the fill and **#000000** (black) for the stroke.

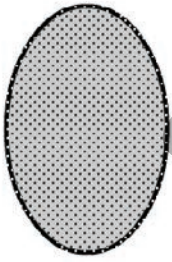


4 On the Stage, draw an oval that is a little taller than it is wide.

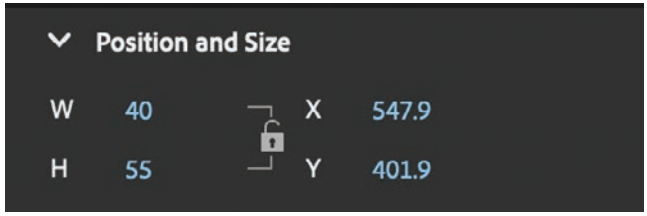


5 Select the Selection tool.

6 Drag the Selection tool around the entire oval to select its stroke and its fill. When a shape is selected, Animate displays it with white dots. You can also double-click a shape, and Animate will select both the stroke and fill of the shape.



7 In the Properties panel, in the Position And Size section, enter **40** for the Width and **55** for the Height. Press Return (macOS) or Enter (Windows) to apply the values.



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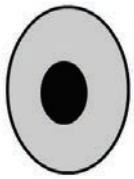
Adding the inside of the eye

Now you'll create the inside of the eye and the white highlight.

1. In the Tools panel, select the Oval tool.
2. Choose a stroke color and a fill color from the bottom of the Tools panel. Enter **#000000** (black) for the fill and **#000000** (black) for the stroke.
3. Draw a smaller black oval inside the larger oval on the Stage.



4. Enter **#FFFFFF** (white) as the fill for your Oval tool.
5. Draw a third oval at the top of your black oval, which will be the highlight.

Note The last fill and stroke you used are applied to the next objects you create, unless you change the settings before you draw.

Tip Hold down the Shift key as you draw to constrain your shapes. Holding the Shift key when using the Oval tool creates perfect circles, much like holding the Shift key when using the Rectangle tool creates perfect squares.

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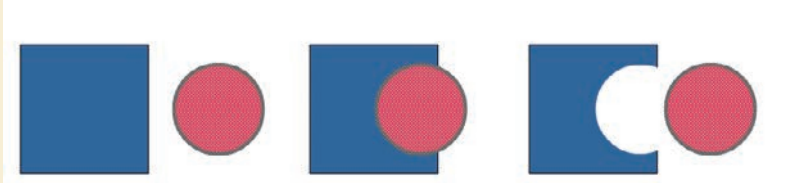
Animate drawing modes

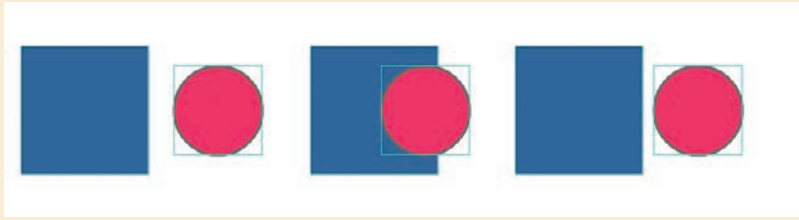
Animate provides three drawing modes that determine how objects interact with one another on the Stage and how you can edit them. By default, Animate uses Merge Drawing mode, but you can enable Object Drawing mode or use the Rectangle Primitive or Oval Primitive tool to use Primitive Drawing mode.

Merge Drawing mode



In this mode, Animate merges drawn shapes, such as rectangles and ovals, where they overlap so that multiple shapes appear to be a single shape. If you move or delete a shape that has been merged with another shape, the overlapping portion is permanently removed.

Object Drawing mode



In this mode, Animate does not merge drawn objects; they remain distinct and separate, even when they overlap. To enable Object Drawing mode, select the drawing tool you want to use, and then click the Object Drawing button at the bottom of the Tools panel.

To convert an object to a shape (Merge Drawing mode), select the object and choose Modify > Break Apart (Command+B/Ctrl+B). To convert a shape to an object (Object Drawing mode), select the shape and choose Modify > Combine Objects > Union. The current shape becomes an object, but keep in mind that it doesn't restore the shape to how it was originally drawn.

Primitive Drawing mode

When you use the Rectangle Primitive tool or the Oval Primitive tool, Animate draws your rectangles or ovals as independent objects that maintain some editable features. Unlike with regular objects, you can modify the corner radius and the start and end angles of rectangle primitives as well as adjust the inner radius of oval primitives using the Properties panel.

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Making selections

To modify an object, you must first be able to select different parts of it. In Animate, you can make selections using the Selection, Subselection, and Lasso tools. Typically, you use the Selection tool to select an entire object or a section of an object. The Subselection tool lets you select a specific point or line in an object. With the Lasso tool, you can make a free-form selection.

Selecting strokes and fills

Now you'll refine the ovals to look more like an eye. You'll use the Selection tool to delete unwanted strokes and fills.

1 In the Tools panel, select the Selection tool.

2 Double-click the stroke around the white oval.

The strokes around both the white oval and the black oval become selected.

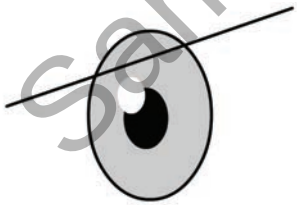
3 Press the Delete/Backspace key.

The strokes are deleted, leaving behind a white oval as the highlight.

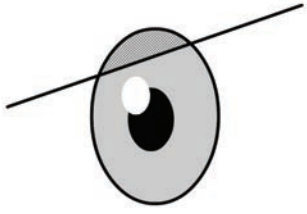
4 Choose the Line tool, and enter **#000000** (black) as the stroke color.

5 Draw a diagonal line that cuts through the top of the eyeball.

The straight line creates intersecting shapes in the eyeball so that they can be selected separately.



6 Choose the Selection tool and click the half-dome gray shape at the tip of the eye.



7 Press the Delete/Backspace key.

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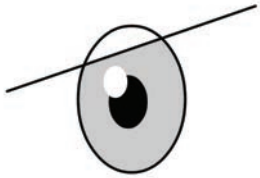
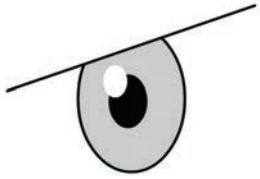
The gray fill is deleted.



8 Choose the curved stroke above the straight line and delete it.

One eye is finished!



Editing shapes

When drawing in Animate, you'll often start with simple shapes such as rectangles, ovals, and lines. But to create more complex graphics, you'll use other tools to modify those base shapes. The Free Transform tool, the Copy and Paste commands, and the Selection tool can help speed up your workflow.

Using Copy and Paste

Use the Copy and Paste commands to easily duplicate shapes on the Stage. Your octopus needs two eyes, so copying and pasting will come in handy.

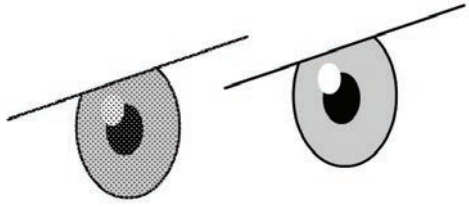
1 Select the Selection tool, and drag it around the entire drawing of your eye.

2 Choose Edit > Copy (Command+C/Ctrl+C).

The eye is copied.

3 Choose Edit > Paste (Command+V/Ctrl+V).

A duplicate eye appears on the Stage. The duplicate remains selected.



4 Move the duplicate eye close to your original eye.

▶ **Tip** Use Paste In Place (Shift+Command+V/Shift+Ctrl+V) if you want to paste the copied graphic in the exact same place where you copied it from.

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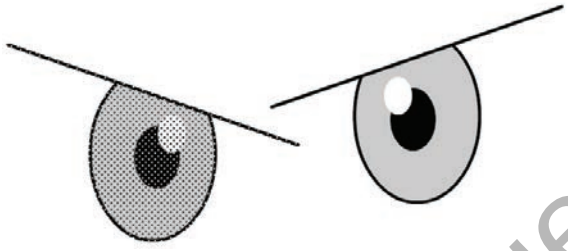
Using Free Transform

The duplicate eye needs to be flipped to make it look right. You'll use the Free Transform tool to make it a mirror image of itself. You can also use the Free Transform tool to change an object's scale, rotation, or *skew* (the way it is slanted), or to distort an object by dragging control points around a bounding box.

1 Choose Modify > Transform > Flip Horizontal.

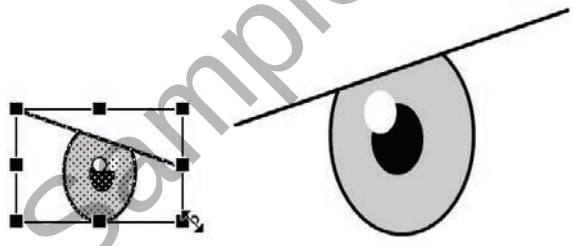
The object flips, and you now have a right eye and a left eye.



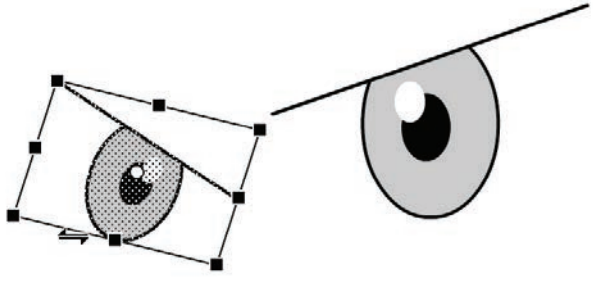
2 Choose the Free Transform tool from the Tools panel.

Transformation handles appear on the eye.

3 Drag a corner point inward to make the left eye a little smaller. Hold down the Shift key while dragging to constrain the proportions so that the eye maintains the same aspect ratio.



4 Have fun making the second eye a little crazy. You can drag the corner points to squash or stretch an object or to rotate the object. You can also drag the sides of the bounding box to skew the object so that it appears slanted.



▶ **Tip** If you press the Option or Alt key while moving one of the control points, Animate scales the selected object relative to its transformation point, represented by the circle icon. You can move the transformation point anywhere, even outside the object. Press Shift to constrain the object proportions. Hold the Command/Ctrl key to distort the object from a single control point.

▶ **Tip** Hold the Command/Ctrl key to drag a single control point to distort the eyeball. If you press and hold Shift+Command/Shift+Ctrl as you drag a corner point, you can move both corners the same distance simultaneously.

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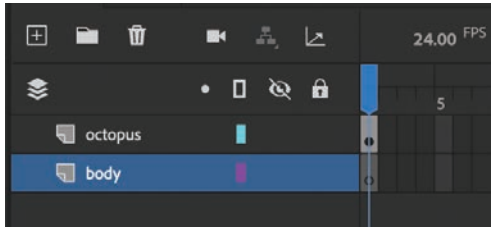
Changing shape contours

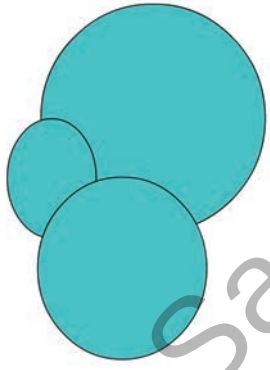
With the Selection tool, you can push and pull lines and corners to change the overall contours of any shape. It's a fast and intuitive way of working with shapes. You'll use this technique to create the organic shape of the octopus head and body.

1 Insert a new layer on the timeline and name it **body**. Drag it so that it is below the octopus layer, which currently contains the eyes.



2 In the Tools panel, select the Oval tool. Choose a green color for the fill (**#33CCCC**) and black for the stroke.

3 Create three overlapping ovals, similar to the following figure, off to the side of the eyes. You don't have to be exact here since you'll edit these shapes.



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4 Select the black outlines and press the Delete key.

The black strokes are deleted.

5 Move your mouse cursor close to the side of one of the ovals.

A curved line appears near your cursor, indicating that you can change the curvature of the stroke.

6 Drag the stroke outward.

The side of the oval bends, giving the octopus head a slight bulge. Push and pull on the contours of the three ovals to create a more organic, bulbous head and natural-looking brow ridge for your octopus.

If you want to create a new corner point so that you can change the directions of a curve, hold down the Option/Alt key while you drag on the curve.

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Changing strokes and fills

If you want to change the properties of any stroke or fill, you can use the Ink Bottle tool or the Paint Bucket tool. The Ink Bottle tool changes stroke colors; the Paint Bucket tool changes fill colors. The check mark next to the quick key indicates the currently selected tool that is displayed in the Tool panel.

- Select the Paint Bucket tool and choose a new fill color in the Properties panel. Click a fill to change its color.
- Select the Ink Bottle tool (hidden under the Paint Bucket tool) and choose a new stroke color in the Properties panel. You can also choose the thickness and style of the stroke. Click a stroke to change its properties.
- You can also simply select a stroke or a fill on the Stage and change its properties by using the Properties panel.

Tip If your Paint Bucket tool changes the fill in surrounding areas, there may be a small gap in the shape outline that allows the fill to spill over. Close the gap manually, or use the Gap Size menu at the bottom of the Tools panel to choose the gap size that Animate will close automatically.

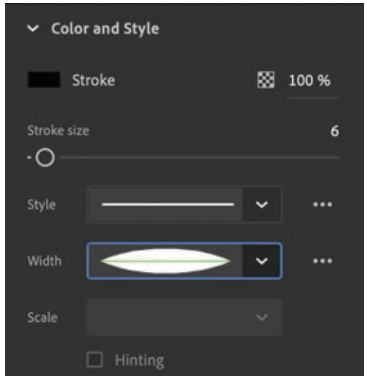
Using variable-width strokes

You can make many different styles of lines for your strokes. In addition to the basic solid line, you can choose a dotted, dashed, or ragged line, or even customize your own. You can also create lines with variable widths and edit the variations with the Width tool.

Adding thick and thin outlines

The variable width of strokes can help give your drawings more expressive character.

1 Select the Ink Bottle tool, and in the Properties panel, choose 6 for the Stroke Size and Width Profile 1 for the Width.



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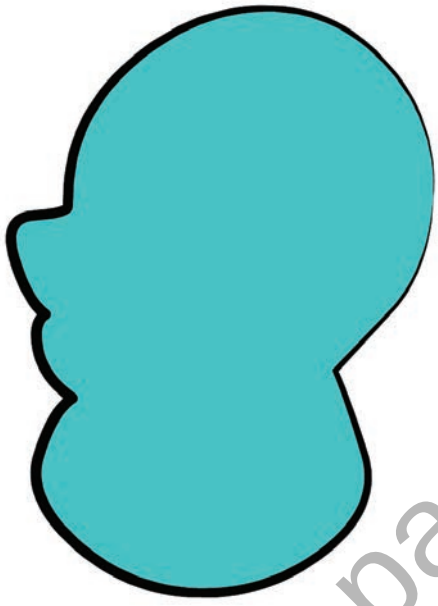
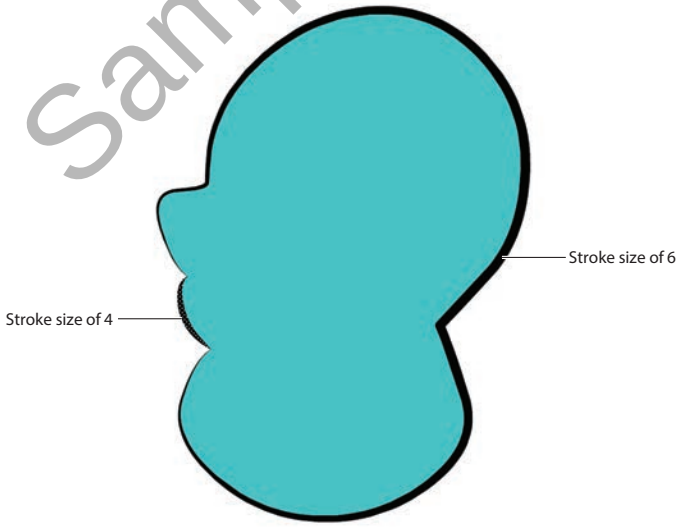
2 Click the large green octopus head.

Animate applies the thick-thin width profile to the outline of your green fill.



3 With the Selection tool, choose a single stroke segment around the green head, and then change the Stroke Size to 4.

Now you have two different stroke widths around your shape.



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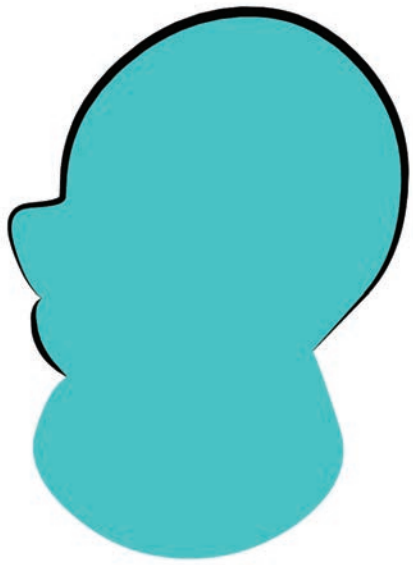
4 Delete the stroke around the bottom oval shape. You'll connect the octopus tentacles there, so you won't need the black outline.



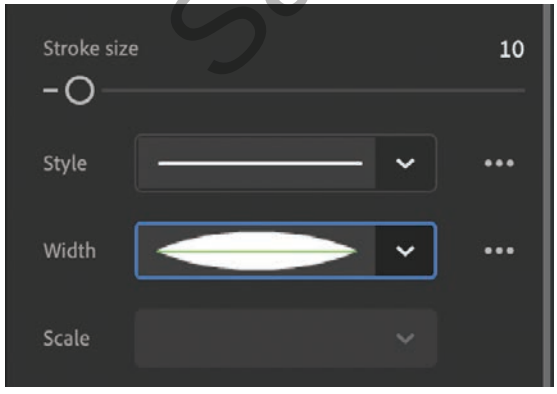
Refining variable-width lines

In addition to applying different width profiles to a stroke, you can customize where the bulges appear and how wide the bulges are with the Width tool.

1 Hold down the Shift key and click the three line segments of one of the eyebrows.

2 In the Properties panel, change the Stroke Size to 10.

3 Change the Width to Width Profile 1.



The straight line turns into a thicker line that is skinny on the ends and fatter in the middle, giving it a little more personality.

▶ **Tip** Edit variable-width lines as you would any other stroke. Use the Selection or Subselection tool to bend the curves or move the anchor points.

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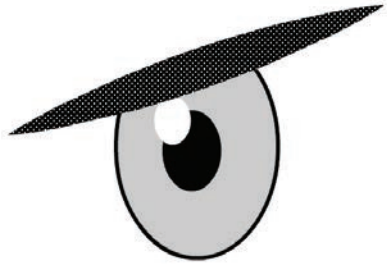
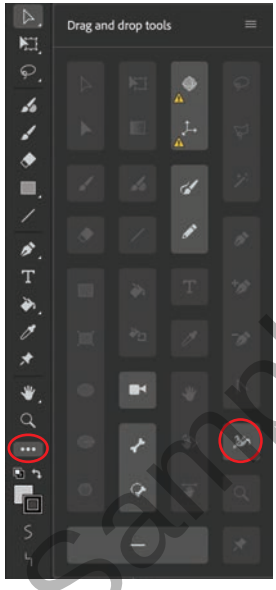


4 Click the three dots at the bottom of the Tools panel to edit the Toolbar.

5 Drag the Width tool from the Drag And Drop Tools panel to your Tools panel so that you can use it. Click off the Tools panel or press the Esc key to collapse it.

▶ **Tip** To delete an anchor point of a variable-width line, click to select the anchor point and press Delete/Backspace.



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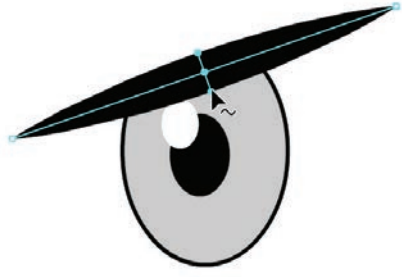
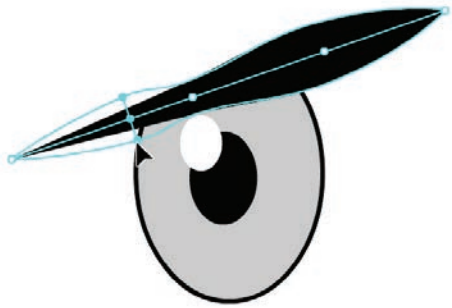
6 Move your mouse pointer over one of your variable-width strokes.

Anchor points appear along the line to show you where the thick and thin portions of the line are located.



7 Drag the handles at any anchor point to change the width of the line. Exaggerate some of the restrictions and bulges.

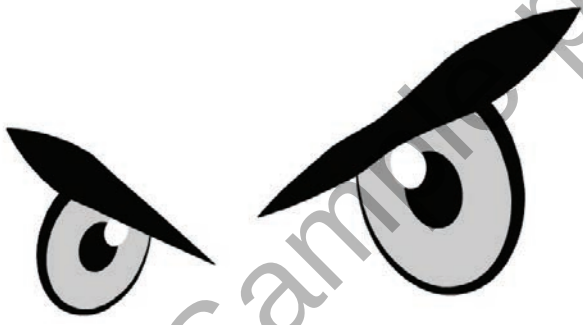
▶ **Tip** Hold down Option/Alt when you want to modify only one side of a variable-width line.



8 Drag an anchor point along the stroke to move its location.

9 Drag anywhere along the stroke to add a new anchor point and define the width at that location. Animate displays a small plus (+) sign next to your pointer to indicate that you can add an anchor point.

10 Modify both eyebrows of your octopus as you see fit, and apply a different width profile to the outline around the eyes as well.



Sample pages

Organizing your drawing

Now that you've finished creating the eyes and the head, you'll want to start organizing the different parts of the drawing. You've already organized different shapes by putting them in separate layers, but you can also use groups to keep them separated.

Grouping objects

A group holds together a collection of shapes and other graphics to preserve their integrity. When the elements that compose the eyes are grouped, you can move them as a unit without worrying that the eyes might merge and intersect with underlying shapes in the same layer.